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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2021/0113150 A1**  
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MONITORING PHYSICAL THERAPY OF  
THE KNEE AND OTHER JOINTS**

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**G06F 3/0481** (2006.01)(52) **U.S. Cl.**CPC ..... **A61B 5/4848** (2013.01); **A41D 1/002** (2013.01); **A61B 5/0004** (2013.01); **A61B 5/002** (2013.01); **A61B 5/1121** (2013.01); **A61B 5/4585** (2013.01); **G06F 3/0484** (2013.01); **A61B 5/0002** (2013.01); **A61B 5/00** (2013.01); **A61B 5/4528** (2013.01); **G06F 3/0481** (2013.01); **A61B 2505/09** (2013.01); **A61B 5/4878** (2013.01)(73) Assignee: **ZipLine Medical, Inc.**, Campbell, CA (US)(21) Appl. No.: **17/133,789**

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**ABSTRACT**(22) Filed: **Dec. 24, 2020**

Systems, devices, and methods for post-surgical joint range of motion measurement, activity monitoring, as well as monitoring compliance with post-operative extremity elevation and cooling recommendations are provided. The system comprises sensor(s) to be attached adjacent a joint of the patient, with limb attachment element(s), applications running on a computing device of the patient and medical practitioner, and a cloud-based backend system.

**Related U.S. Application Data**

(63) Continuation of application No. 16/387,446, filed on Apr. 17, 2019, now Pat. No. 10,918,332, which is a continuation of application No. PCT/US17/59286, filed on Oct. 31, 2017.

